

## EE 321 HW 3

“Which section has better grade?”

### *Story of the homework*

Let's say, an instructor came to you and said “I have two sections. Last week there was an exam, and I saved all grades into my VerySimpleCPU computer. Now I am wondering which section is more successful. Could you calculate average of both section for me?”

Let's help this guy!

### **Instructions:**

1. Find sum of grades of section A.
2. Divide the result into number of students by calling division subroutine.
3. Do 1 and 2 for section B.

### **Notes (!! Watch the [video](#).)**

- There is an initial asm code
- Grades and divider function are in the file. Read comments.
- Do not modify existing lines.
- Code loops to sum all grades of sections (if you couldn't, do it with brute force summing but we will penalize it)
- Use function call for division.
- Upload your code into LMS as a single **hw3\_function\_call.asm** file.

### **Steps of function call**

- Pass parameters to function (copy them to allocated address)
- Put returning address to stack pointer
- Jump to the function
- After function execution, program counter automatically returns to address inside the stack pointer
- Copy the results from function to required address (sum of array 1 and 2 and mean of array 1 and 2 to corresponding addresses.)

### **Bonus**

Write your array sum function and use it twice. Put a comment at the beginning of the code about you completed the bonus and indicate starting address of your sum function. Otherwise, we do not evaluate it.

Good Luck 😊